

UNITED STATES PATENT AND TRADEMARK OFFICE



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

| P.O. Box 1450 | |
|----------------------|------------|
| Alexandria, Virginia | 22313-1450 |
| www.uspto.gov | |

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|------------------------|----------------------------|--------------------------|---------------------|------------------|
| 10/609,048 | 06/27/2003 | Gary Catlett | GGG.101 | 6939 |
| 24062 | 7590 08/17/2004 | | EXAMINER | |
| CAMORIANO & ASSOCIATES | | GRAVINI, STEPHEN MICHAEL | | |
| | YVILLE ROAD E, KY 40222 | A D.T. I. INIT | | PAPER NUMBER |
| | -, | | 3749 | |

DATE MAILED: 08/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | Application No. | Applicant(s) | |
|--|--|---|-----------------------------------|
| 055 4 4' 0 0 | 10/609,048 | CATLETT, GARY | $\mathbb{N} \setminus \mathbb{V}$ |
| Office Action Summary | Examiner | Art Unit | 10 |
| | Stephen Gravini | 3749 | |
| The MAILING DATE of this communication Period for Reply | appears on the cover sheet wit | th the correspondence add | ress |
| A SHORTENED STATUTORY PERIOD FOR RETHE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication - If the period for reply specified above is less than thirty (30) days, If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by some Any reply received by the Office later than three months after the rearned patent term adjustment. See 37 CFR 1.704(b). | ON. FR 1.136(a). In no event, however, may a ren. a reply within the statutory minimum of thirty eriod will apply and will expire SIX (6) MON' statute, cause the application to become AB | eply be timely filed y (30) days will be considered timely. THS from the mailing date of this com ANDONED (35 U.S.C. § 133). | nmunication. |
| Status | | | |
| 1) Responsive to communication(s) filed on 2 | 27 June 2003. | | |
| | This action is non-final. | | |
| 3) Since this application is in condition for all closed in accordance with the practice und | | | merits is |
| Disposition of Claims | | , | |
| • | ion | | |
| 4)⊠ Claim(s) <u>1-9</u> is/are pending in the applicati 4a) Of the above claim(s) is/are with | | | |
| 5) Claim(s) is/are allowed. | ididim nom oonelaala. | | |
| 6)⊠ Claim(s) <u>1-9</u> is/are rejected. | | | |
| 7) Claim(s) is/are objected to. | | | |
| 8) Claim(s) are subject to restriction a | nd/or election requirement. | | |
| Application Papers | | | |
| 9) ☐ The specification is objected to by the Example 1. | miner. | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ | accepted or b) objected to | by the Examiner. | |
| Applicant may not request that any objection to | | | |
| Replacement drawing sheet(s) including the co | | | |
| 11)☐ The oath or declaration is objected to by th | e Examiner. Note the attached | I Office Action or form PTC | O-152. |
| Priority under 35 U.S.C. § 119 | | | |
| 12) Acknowledgment is made of a claim for for | eign priority under 35 U.S.C. § | 119(a)-(d) or (f). | |
| a) ☐ All b) ☐ Some * c) ☐ None of: | | | |
| Certified copies of the priority docur | ments have been received. | | |
| Certified copies of the priority docur | | | |
| Copies of the certified copies of the | | received in this National S | Stage |
| application from the International Bu | | | |
| * See the attached detailed Office action for a | a list of the certified copies not | received. | |
| Attachment(s) | | | |
| 1) Notice of References Cited (PTO-892) | 4) \prod Interview S | Summary (PTO-413) | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-94) | 8) Paper No(s | s)/Mail Date | 152) |
| Information Disclosure Statement(s) (PTO-1449 or PTO/S Paper No(s)/Mail Date <u>20030627</u>. | 5) Notice of 16 6) Other: | nformal Patent Application (PTO- | -102) |

Art Unit: 3749

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Claims 1-2, 4, 6, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Daukss (US 5,295,811). Daukss is considered to disclose the claimed invention comprising:

a cylindrical shell **12** defining first and second ends, an interior, an exterior, and a longitudinal axis;

a burner 63 located at the first end of the shell;

a plurality of flights **82** or **83** secured to the interior of the shell and overlapping each other, each of said flights including an inner metal plate defining an inner surface that is convex toward the longitudinal axis of the shell and an outer surface that is concave toward the shell (please see column 6 line 48 through column 7 line 47 wherein the disclosed description of convex and/or concave shape implies the claimed convex/concave metal plane definitions); and

insulation 17 or 18 secured to the outside of said inner metal plate or an inner metal shell 38 having a convex inner surface and a concave outer surface;

an outer metal shell **14** having a convex outer surface and a concave inner surface, said inner and outer metal shells being secured together with their concave surfaces facing each other to form a hollow compartment; and

Art Unit: 3749

insulation 17 or 18 located in said hollow compartment between said inner and outer metal shells. Daukss is considered to also disclose the claimed flexible insulation at column 8 line 67 wherein the disclosed layers is considered to implicitly teach the claimed flexible feature and the claimed bolted flights at column 4 line 47.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 3, 5, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daukss in view of Bailey (US 3,652,194). Daukss is considered to disclose the claimed invention, as discussed above under the anticipatory rejection, except for the claimed ceramic fibers. Bailey is considered to disclose the claimed ceramic fibers at column 5 line 63. It would have been obvious to one skilled in the art to combine the teachings of Daukss with the ceramic fibers, considered to be expressly disclosed in

Art Unit: 3749

Bailey for the purpose of using an insulation with different heat transfer properties from that of a shell such that drying is optimized.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Daukss in view of Smith (US 4,447,205). Daukss is considered to disclose the claimed invention, as discussed above under the anticipatory rejection, except for the claimed fiber insulation. Smith is considered to disclose the claimed fiber insulation at column 13 lines 52-53. It would have been obvious to one skilled in the art to combine the teachings of Daukss with the fiber insulation, considered to be expressly disclosed in Smith for the purpose of using an insulation with different heat transfer properties from that of a shell such that drying is optimized.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen Gravini whose telephone number is 703 308 7570. The examiner can normally be reached on normal weekday business hours (east coast time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira S. Lazarus can be reached on 703 308 1935. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3749

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Smg August 12, 2004

Stoph on Grami.